



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/067,148	05/26/1993	LUC MONTAGNIER	3495.000404	5174
22852	7590	01/18/2006	EXAMINER	
FINNNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			PARKIN, JEFFREY S	
		ART UNIT	PAPER NUMBER	
			1648	

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

DEA/FCE-1994

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/067,148	05/26/1993	Montagnier, L., et al.	3495.000404

EXAMINER	
Jeffrey S. Parkin, Ph.D.	
ART UNIT	PAPER NUMBER
1648	01/17/2006

L J DATE MAILED:

Please find below a communication from the EXAMINER in charge of this application  
Commissioner of Patents

**37 C.F.R. § 1.84**

The drawings filed on 28 December, 2005, are objected to because **Figure 5 is illegible**. No reasonable assessment or interpretation of the data contained therein can be made. Corrected drawing sheets in compliance with 37 C.F.R. § 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 C.F.R. § 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings

will not be held in abeyance.

**37 C.F.R. § 1.58**

The disclosure is objected to because it fails to comply with 37 C.F.R. § 1.58. Applicants are reminded that pursuant to paragraph (a) of this section, **the specification**, including the claims, may contain chemical and mathematical formulas, but **shall not contain drawings or flow diagrams**. **Pages 32-37 of the disclosure contain drawings.** Applicants are required to submit an amendment to the specification that deletes the drawings set forth in the originally filed specification.

Applicant is given a **TIME PERIOD of ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 C.F.R. § 1.136(a).**

**Correspondence**

Any inquiry concerning this communication should be directed to Jeffrey S. Parkin, Ph.D., whose telephone number is (571) 272-0908. The examiner can normally be reached Monday through Thursday from 10:30 AM to 9:00 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, James C. Housel, can be reached at (571) 272-0902. Direct general status inquiries to the Technology Center 1600 receptionist at (571) 272-1600. Informal communications may be submitted to the Examiner's RightFAX account at (571) 273-0908.

Applicants are reminded that the United States Patent and Trademark Office (Office) requires most patent related correspondence to be: a) faxed to the Central FAX number (571-273-8300) (updated as of July 15, 2005), b) hand carried or delivered to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), c) mailed to the mailing address set forth in 37 C.F.R. § 1.1 (e.g., P.O. Box 1450, Alexandria, VA 22313-1450), or d) transmitted to the Office using the Office's Electronic Filing System. This notice replaces all prior Office notices specifying a specific fax number or hand carry address for certain patent related correspondence. For further information refer to the Updated Notice of Centralized Delivery and Facsimile Transmission Policy

U.S. Serial No.: 08/067,148  
Applicants: Montagnier, L., et al.

for Patent Related Correspondence, and Exceptions Thereto, 1292 Off. Gaz. Pat. Office 186 (March 29, 2005).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully,

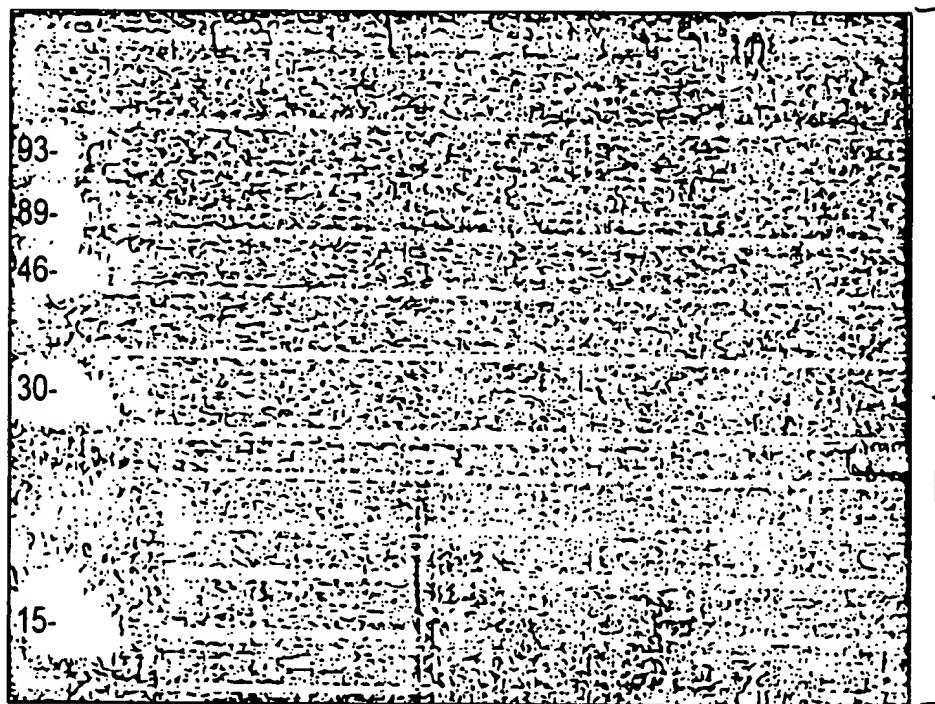
  
Jeffrey S. Parkin, Ph.D.  
Primary Examiner  
Art Unit 1648

17 January, 2006

# Replacement Sheet

## POLYACRYLAMIDE GEL ELECTROPHORESIS (12.5%) OF IMMUNE COMPLEXES BETWEEN $^{35}$ S-LABELLED VIRUS AND HORSE SERA.

17712 U.S.PTO  
122805



$^{35}$ S LAV WAS PREPARED AND PRECIPITATED WITH PEG (WITHOUT FURTHER PURIFICATION), AS DESCRIBED IN FIGURE 4. THE VIRAL PELLET WAS LYSED IN RIPA BUFFER [1] AND 50-ul ALIQUOTS WERE INCUBATED WITH 5-ul ALIQUOTS OF VARIOUS SERA (1 h AT 37°C, 18 h AT 4°C). IMMUNE COMPLEXES WERE ISOLATED BY PROTEIN A SEPHAROSE BEADS, AS PREVIOUSLY DESCRIBED [1] AND RUN ON THE GELS AFTER DENATURATION (AUTORADIOGRAM):

1= REFERENCE EIAV-INFECTED HORSE SERUM.

2= 1/10 DILUTION OF THE SAME SERUM.

3= ANTI-VISNA GOAT SERUM.

4= 1/10 DILUTION OF SERUM 3.

5,6 AND 7= 3 SERA FROM UNINFECTED HORSES.

8,9 AND 10= 3 MORE SERA FROM EIAV-INFECTED HORSES.

ARROW INDICATES THE p25 PROTEIN.

# FIG. 5

FIG. 1 is electron micrographs of ultrathin sections of lymphocytes of a healthy adult donor infected with the retrovirus isolated from a haemophiliac patient with AIDS (IDA V<sup>2</sup>).

Note the numerous budding with projections at their surface and a mature particle with a small core.

**FIG. 2** is an ultrastructural comparison between HTLV and LAV.

A: HTLV particles produced by C10 MJ<sub>2</sub> cell line. Note the large core of mature particles and a typical budding.

B: LAV mature particles with dense core and one budding produced by infected lymphocytes.

FIG. 3 is an intracellular vesicle in LAV-infected lymphocytes.

Arrow indicates a budding particle.

FIG. 4 is an electrophoresis and autoradiogram of  
<sup>35</sup>methionine-labelled LAV.

Autoradiogram of this gel, with, on the left, molecular weight markers in kilodaltons. Note that the p25 protein coincides with the peak of labelled virus and that of reverse transcriptase activity (not represented).

2nd panel: banding of LAV in a Nycodenz gradient. Infected lymphocytes from a healthy donor were labelled for 18 h in the presence of  $^{35}\text{S}$ -methionine, as described in [1]. Virus was precipitated from the clarified supernatant with 10% PEG 6000 overnight at 4°C and the pellet was resuspended in 0.5ml of NTE buffer (0.1M NaCl, 0.01M Tris, 0.001M EDTA, pH 7.4). It was then banded to equilibrium in a linear Nycodenz (Nyegaard, Oslo, 5.35%) gradient in a SW56 rotor for 3 h at 45,000 rpm, 2°C. Aliquots of the collected fraction were assayed for RT activity (10  $\mu\text{l}$ ), radioactivity (20  $\mu\text{l}$ ; thick line), and 40  $\mu\text{l}$  were electrophoresed on a polyacrylamide gel (12.5%) under denaturing conditions. Density of retroviruses in Nycodenz gradients (LAV or MuLV) was very low (around 1.10).

**FIG. 5** is a polyacrylamide gel electrophoresis (12.5%) of immune complexes between <sup>35</sup>S-labelled virus and horse sera.

<sup>35</sup>S LAV was prepared and precipitated with PEG (without further purification), as described in figure 4. The viral pellet was lysed in RIPA buffer [1] and 50-ul aliquots were incubated with 5-ul aliquots of various sera (1 h at 37°C, 18 h at 4°C). Immune complexes were isolated by protein A Sepharose beads, as previously described [1] and run on the gels after denaturation (autoradiogram):

- 1=reference ELAV-infected horse serum.
- 2=1/10 dilution of the same serum.
- 3=anti-Visna goat serum.
- 4=1/10 dilution of serum 3.
- 5, 6 and 7=3 sera from uninfected horses.
- 8, 9 and 10=3 more sera from ELAV-infected horses.

Arrow indicates the p25 protein.